

**REMARKS**

Applicants thank the Examiner for the indication of allowable subject matter in terms of claim 28. Applicants believe that all claims are allowable in light of the amendment, arguments and the accompanying Declaration under 37 CFR 1.131

The drawings are objected to in section 1 of the OA, as the express path claimed in claim 6 and 28 are not shown. Claims 6 and 28 have been deleted, as has the supporting text in the disclosure.

Claims 3 and 4, have been cancelled, with any dependent claims amended to either depend from claim 1, or amended claim 7. Claim 7 has been amended to include all but the final limitations of claim 3.

Claims 20-22 are also cancelled.

Regarding Section 3 of the official action, Claims 1, 3, 4, 7, 12, 13, 15-17, 19, 20-22, 24, 30, 31 and 33 are rejected under 35 USD 103 (a) as being unpatentable over Cao in view of Hajjar.

Claims 3, 4 and 20-22 have been cancelled. We respectfully submit that the remainder of these claims are patentable, and the rejection is traversed as follows. With respect, the rejection is not proper as it simply fails to establish *prima facie* obviousness. For the Patent Office to combine references in an obviousness analysis, the Patent Office must do two things. First, the Patent Office must articulate a motivation to combine the references, and second, the Patent Office must support the articulated motivation with actual evidence. *In re Dembiczak*, 175 F.3d 994,999 (Fed. Cir. 1999). While the range of sources for the motivation is broad, the range of available sources does not diminish the requirement for actual evidence. *Id.* Once the Patent Office has properly combined the references, to establish *prima facie* obviousness, the Patent Office must still show where each and every claim element is shown. MPEP §2143.03.

Contrary to the assertions made in the Office Action rejecting the claims, Applicants respectfully submit that no proper motivation to combine appears to exist.

As admitted by the examiner, Cao does not teach or suggest the claimed method for "each one of N optical Systems". Cao does not include, either within the cited passages, or generally, teachings with respect to the satisfaction of dispersion requirements of interconnected optical systems.

The Hajjar reference is relied on to teach add/drop multiplexing for a plurality of systems. The Hajjar patent teaches only a method of interconnecting optical sources and receivers and does not address in any way the complications arising from fibre optic transmission systems. In particular, Hajjar does not teach or suggest compensation for dispersion (or amplitude) as claimed. Indeed, Hajjar does not even mention the words compensation, dispersion or amplitude.

Accordingly not only has the OA failed to establish any motivation or suggestion to combine the references, as these references are directed to different problems, it is clear that there is no motivation or suggestion to combine these references. The stated motivation to combine the references in order to process greater amounts of data on multiple incoming and outgoing fibers/optical systems in a large optical network simply does not lead a person skilled in the art to a solution which satisfies the dispersion requirements of interconnected optical systems. Without limiting the generality of the foregoing, this is especially true where those systems have different requirements due to fibre length or type as would the present application.

Similar arguments apply for the other rejected claims. Consequently, the claims are patentable and withdrawal of the rejections are requested.

These arguments are even more strong for dependent claims which specifically indicate target values which are suitable for transmission requirements of a respective one of the N optical systems, for example claim 12. Clearly neither Cao nor Hajjar, nor any combination of the two references teach or suggest target values for transmission requirements for N optical systems.

These arguments are even stronger still with respect to claims which further require dead-bands, e.g., claims 5, and 23, wherein a 3<sup>rd</sup> reference is required. There certainly no motivation to combine all 3 of these references, and no prima facie case has been established, as set out above.

With respect to section 7 of the OA rejecting claims 8-11, 14, 25-27, 29 and 32, we reiterate the reasons set out above regarding a lack of prima face case. Furthermore, applicants respectfully disagree that the Roorda et al. reference is applicable as prior art against the instant patent application. A Declaration made by the first named inventor accompanies this response and details conception and due diligence up to filing in order to remove this 35 USC §§102(e) reference. Accordingly, the rejections of these claims under 103(a) are believed overcome.

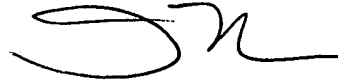
Similar arguments apply to the remainder of the claims. Accordingly, all of the remaining claims are now in allowable form, and withdrawal of the rejections and allowance of the application is requested.

No fee is believed due for this submission. **However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.**

It is submitted that this application is now in condition for allowance, and action to that end is respectfully requested.

Respectfully submitted,

**David Boertjes et al.**



By: \_\_\_\_\_

Dennis R. Haszko  
No. 39,575

Borden Ladner Gervais LLP  
World Exchange Plaza  
100 Queen Street, Suite 1100  
Ottawa, ON K1P 1J9  
CANADA  
Tel: (613) 237-5160  
Fax: (613) 787-3558  
E-mail: jmeasures@blgcanada.com  
Encls.  
1. Declaration  
2. Exhibit A to Declaration